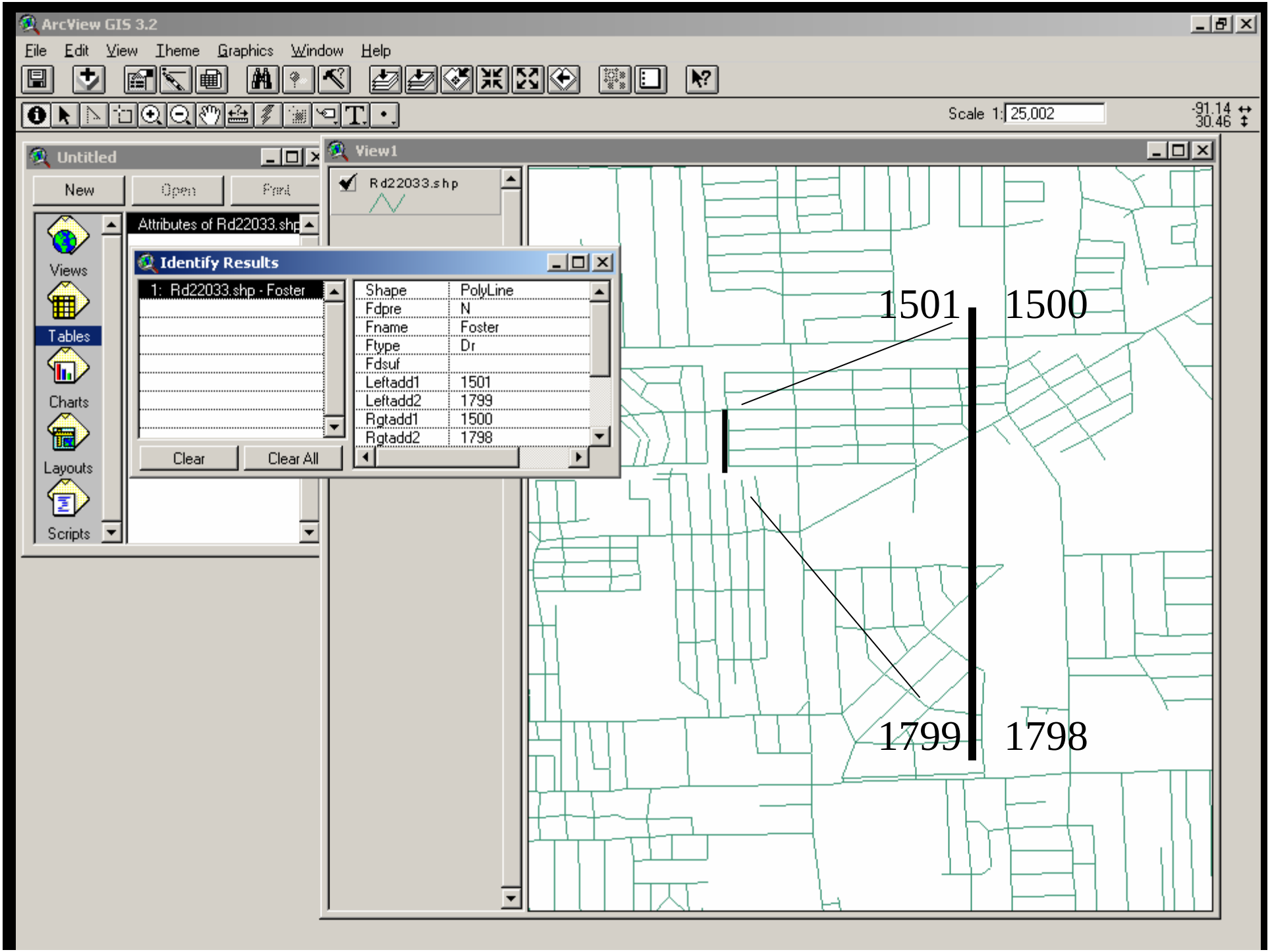

ArcView GIS 3.2
File Edit View Theme Graphics Window Help
Scale 1: 25,002
-91.14
30.46
Untitled
New
Open
Find
Views
Tables
Charts
Layouts
Scripts
Attributes of Rd22033.shp
Identify Results
1: Rd22033.shp - Foster
Clear
Clear All
Shape PolyLine
Fdpre N
Fname Foster
Ftype Dr
Fdsuf
Leftadd1 1501
Leftadd2 1799
Rgtadd1 1500
Rgtadd2 1798
View1
Rd22033.shp
1501
1500
1799
1798

Finding
1660 Foster Drive

1501 | **1500**

Distance between nodes = 54 meters

Address range

1799 | **1798**

1798-1500 = 298

1798 – 1660 = 138

1660 – 1500 = 160

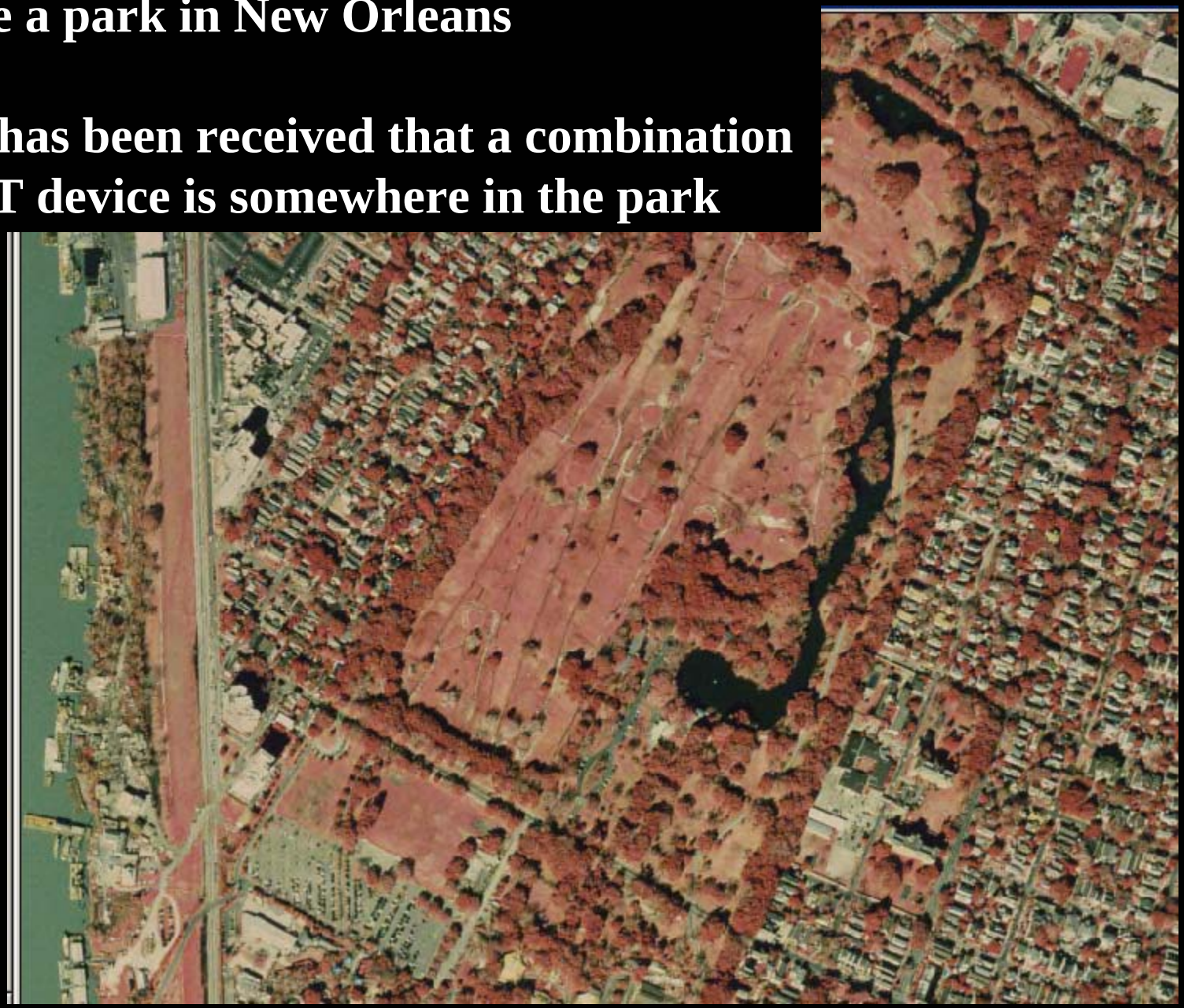
160/298 = 0.54

If the road segment is 100 meters long

100*0.54 = 54 meters

DOQQs are also useful for heads-up digitizing
Here we have a park in New Orleans

Information has been received that a combination explosive / BT device is somewhere in the park

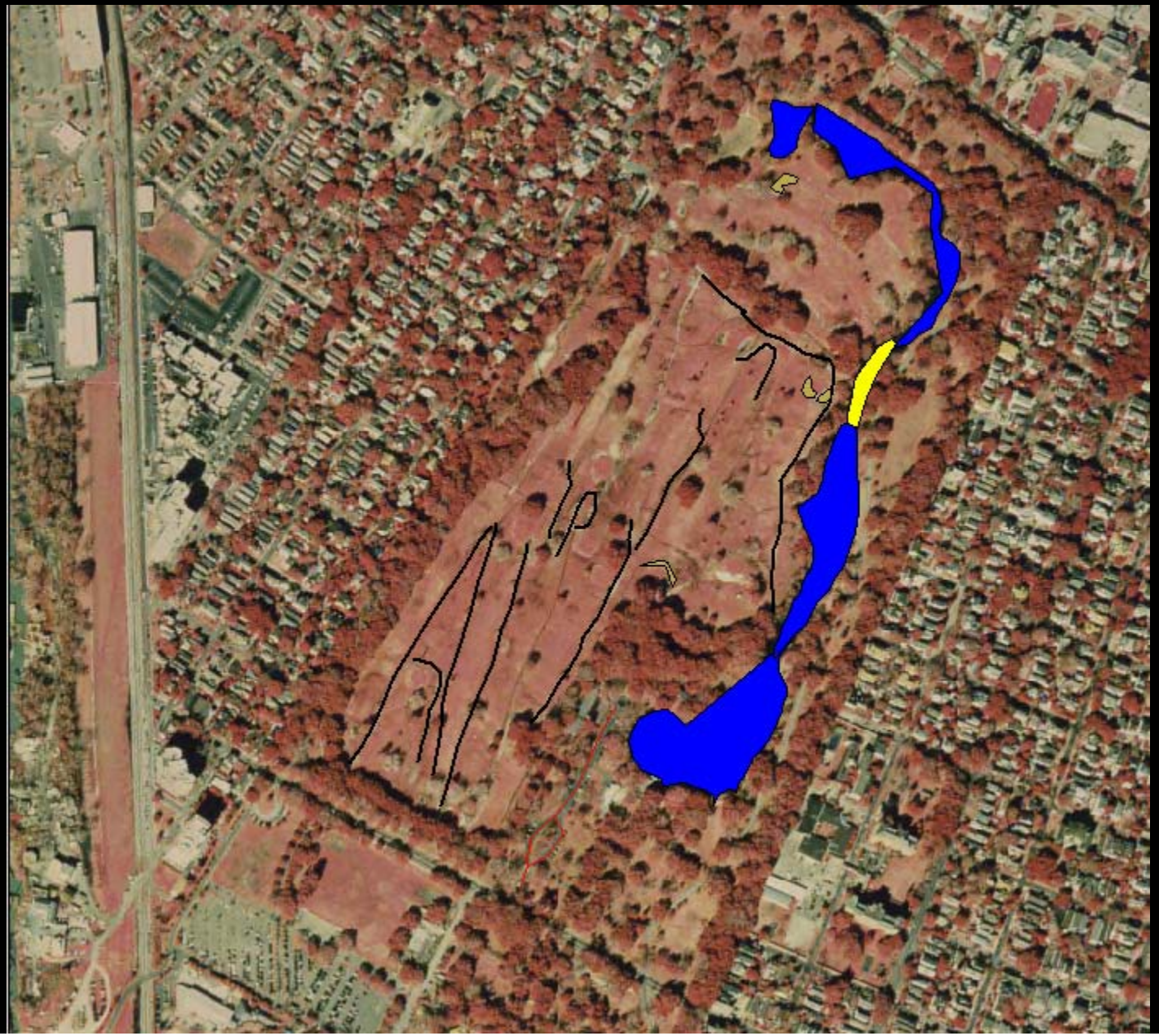


The GIS analyst immediately begins to digitize all Visible features in the park so that ground teams, running Hand held GIS/GPS units can determine areas of vulnerability

Trees digitized as points

Zoom in

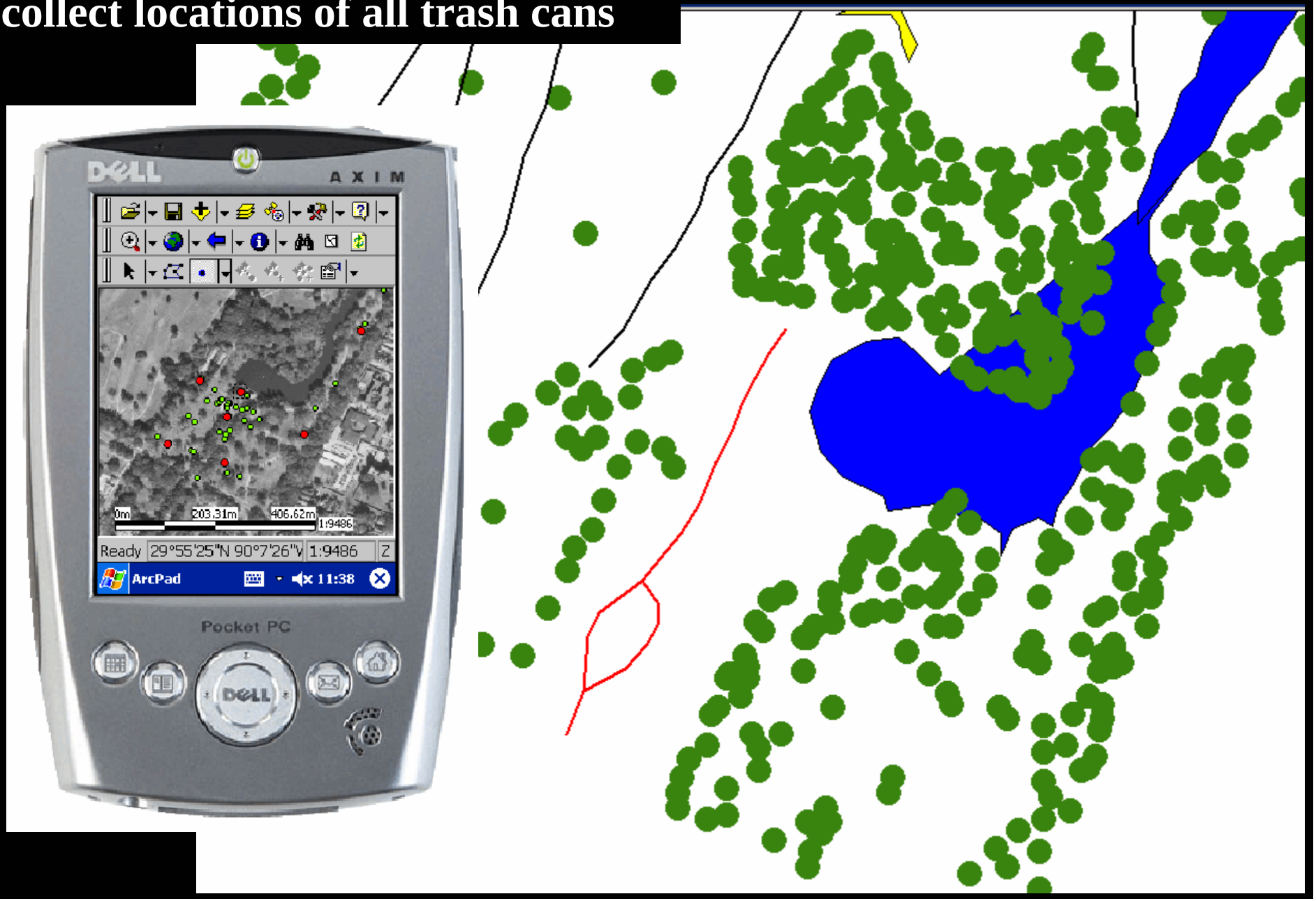
Adding other features (paths and water)



Putting it all together

The features that would
Be used to guide data collection

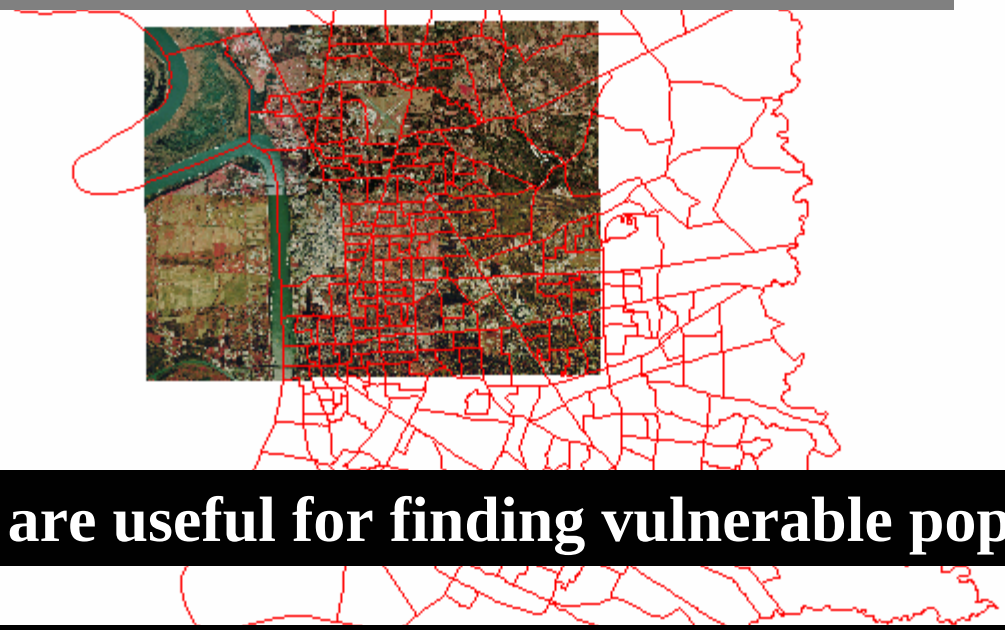
Field Teams use the information to collect locations of all trash cans



How many people are vulnerable
If the explosion occurred in this trash can?

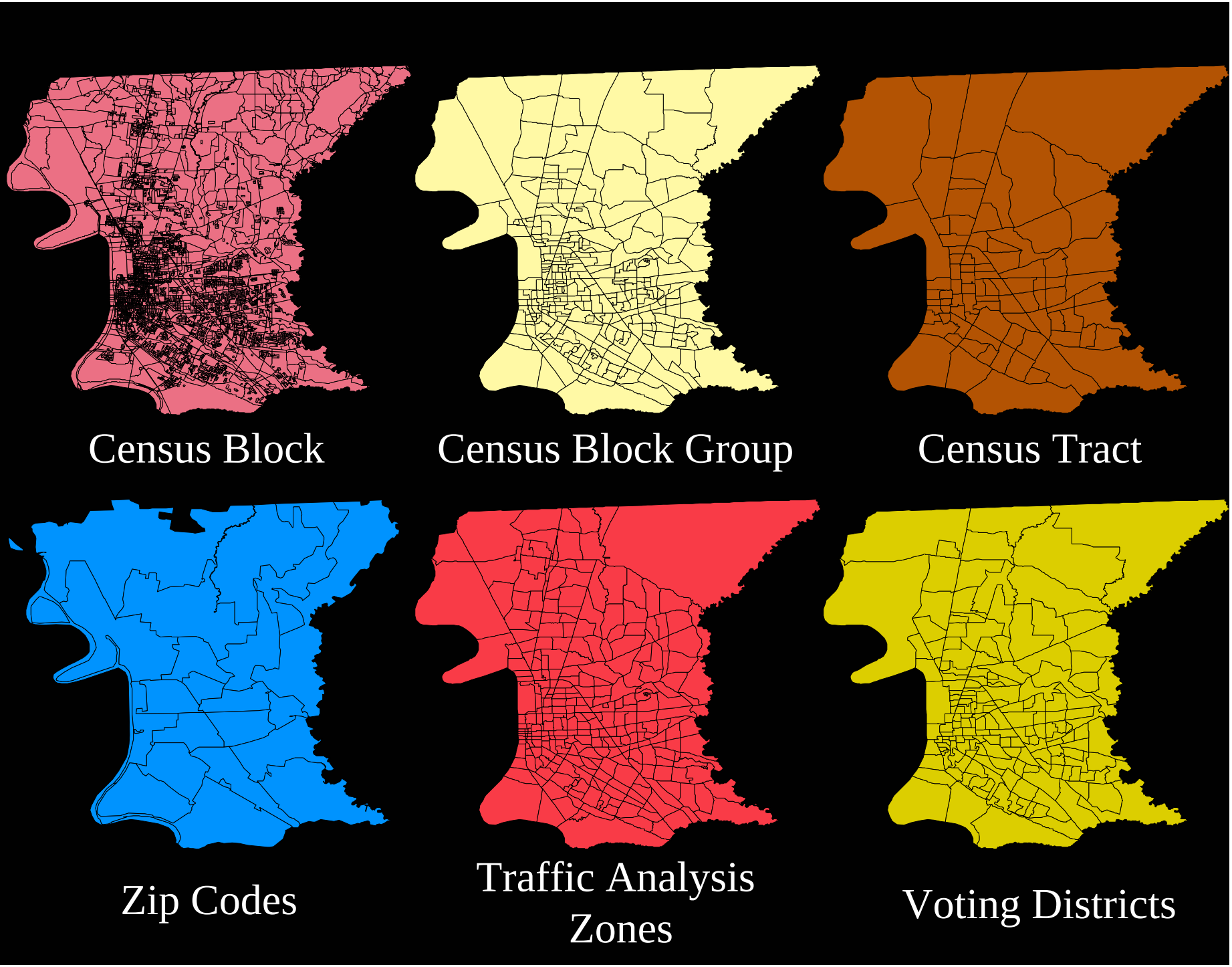
Need Political Boundaries and Census Data

Zip Codes
Census Tracts
Census Block Groups
Census Blocks



These are useful for finding vulnerable populations

Beware!
The The Boundary You Chose Can Change the Pattern of Risk


Census Block
Census Block Group
Census Tract
Zip Codes
Traffic Analysis Zones
Voting Districts

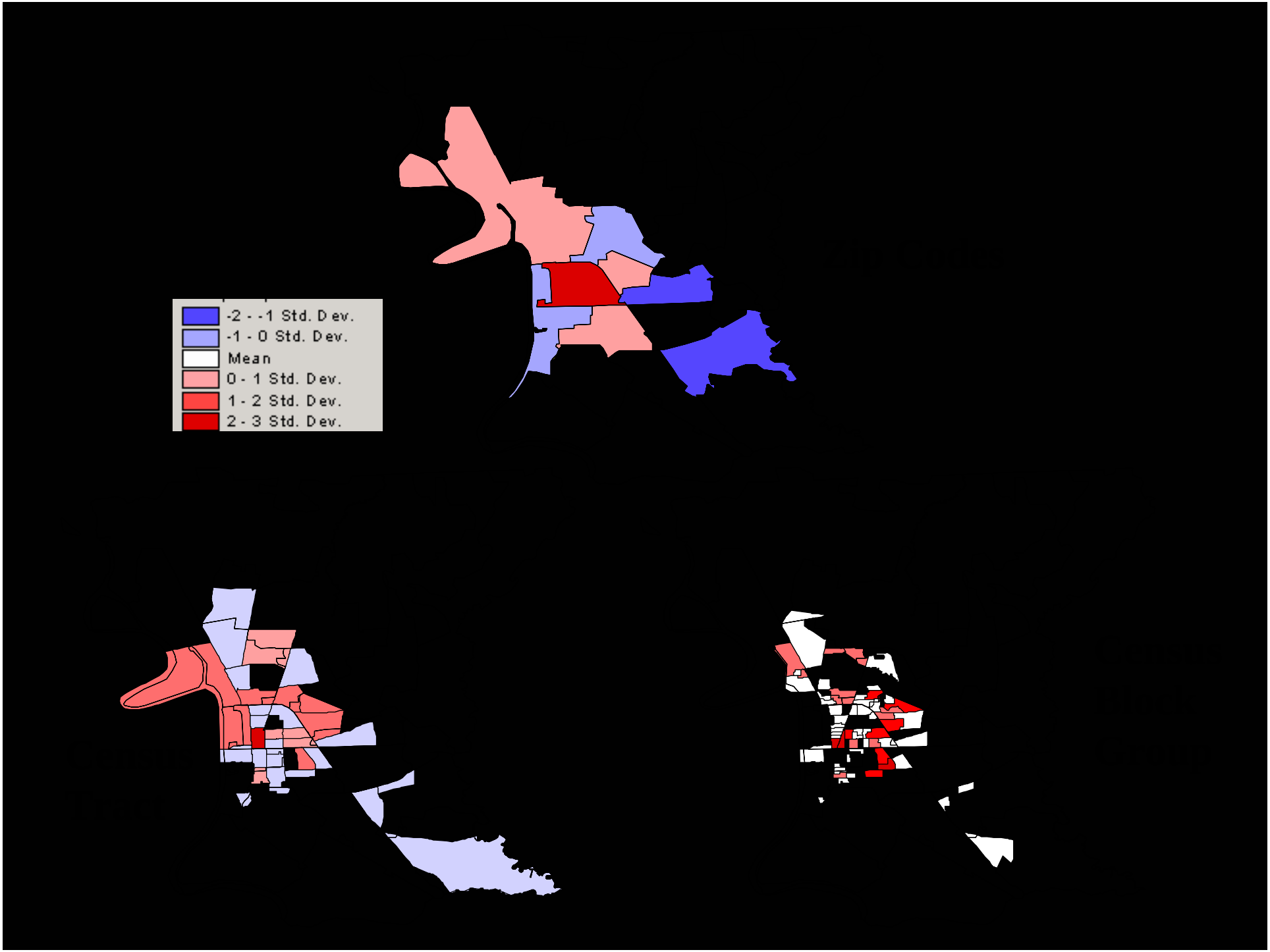
Socioeconomic Data is often available for Census Units of Space

Another way to get information about vulnerable populations is to Use a spatial sample

Detailed Data about a subpopulation, in this case single mothers with Young children in the home is collected

These data are joined to boundary files by a point-in-polygon Procedure

Risk maps can then be generated, but notice how the patterns vary according to the spatial aggregation used…..


-2 - -1 Std. Dev.
-1 - 0 Std. Dev.
Mean
0 - 1 Std. Dev.
1 - 2 Std. Dev.
2 - 3 Std. Dev.